

CONTENTS

Conformational analysis of β -D-fructofuranosyl-(2 \rightarrow 6)- β -D-glucopyranoside by molecular mechanics (MM2) calculations A.L. Waterhouse (Davis, CA, USA), K. Horváth and J. Liu (New Orleans, LA, USA) . . .	1
Observation by solid-state ^{13}C CP MAS NMR spectroscopy of the transformations of wheat starch associated with the making and staling of bread K.R. Morgan, R.H. Furneaux and R.A. Stanley (Lower Hutt, New Zealand)	15
X-ray fibre diffraction studies of chitosan and chitosan gels P. Cairns, M.J. Miles, V.J. Morris, M.J. Ridout, G.J. Brownsey (Norwich, United Kingdom) and W.T. Winter (Syracuse, NY, USA)	23
Analysis of residue types in curdlan sulfate by nuclear magnetic resonance H. Miyano, R. Nakagawa, E.-i. Suzuki (Kawasaki, Japan) and T. Uryu (Tokyo, Japan) . . .	29
On the characterization of the reaction of organotin compounds with D-glucuronic acid H.E. Guard, W.M. Coleman III (Arlington, VA, USA) and M.M. Ross (Washington, DC, USA)	41
A ^1H NMR database computer program for the analysis of the primary structure of complex carbohydrates J.A. van Kuik, K. Hård and J.F.G. Vliegthart (Utrecht, Netherlands)	53
A ^1H and ^{13}C NMR study of oligosaccharides from human milk. Application of the computer program CASPER K. Hermansson, P.-E. Jansson, L. Kenne, G. Widmalm and F. Lindh (Stockholm, Sweden).	69
Fmoc-protected, glycosylated asparagines potentially useful as reagents in the solid-phase synthesis of N-glycopeptides L. Urge, L. Otvos, Jr., E. Lang, K. Wroblewski (Philadelphia, PA, USA), I. Laczko (Szeged, Hungary) and M. Hollosi (Budapest, Hungary)	83
Stereoselective total synthesis of the glycosyl phosphatidylinositol (GPI) anchor of <i>Trypanosoma brucei</i> C. Murakata (Saitama, Japan) and T. Ogawa (Tokyo, Japan)	95
Large-scale synthesis of D-mannose 6-phosphate and other hexose 6-phosphates M. Meldal, M.K. Christensen and K. Bock (Valby, Denmark)	115
Synthesis of a cycloheptaose consisting of (1 \rightarrow 4)-linked 7-amino-6,7-dideoxy- α -D-glucopyranosyl units: A new analog of cyclomaltoheptaose H.H. Baer, Y. Shen (Ottawa, ON, Canada), F. Santoyo González, A. Vargas Berenguel and J. Isac García (Granada, Spain)	129

Synthesis and collagenase inhibition of new glycosides of aranciamycinone: the aglycon of the naturally occurring antibiotic aranciamycin M. Bols (Lyngby, Denmark), L. Binderup, J. Hansen and P. Rasmussen (Ballerup, Denmark)	141
Synthesis of 4-C-methyl analogues of glucosylceramide M. Plewe (Konstanz, Germany), K. Sandhoff (Bonn, Germany) and R.R. Schmidt (Konstanz, Germany)	151
Synthesis, crystalline structure, conformational analysis, and azidolysis of methyl 2,3-anhydro- α -D-manno- and -allo-pyranoside <i>p</i> -bromobenzyl ethers X. Wu, F. Kong, D. Lu and G. Li (Beijing, China)	163
Sulfated sialyl-oligosaccharides derived from tracheobronchial mucous glycoproteins of a patient suffering from cystic fibrosis. T.P. Mawhinney, D.C. Landrum, D.A. Gayer and G.J. Barbero (Columbia, MO, USA) ..	179
The capsular antigen of <i>Escherichia coli</i> serotype O8:K102:H ⁻ A.H. De Bruin, H. Parolis and L.A.S. Parolis (Grahamstown, South Africa)	199
The structure of the capsular polysaccharide of <i>Escherichia coli</i> O9:K35:H ⁻ P.L. Hackland and H. Parolis (Grahamstown, South Africa)	211
The structure of the fructan sinistrin from <i>Urginea maritima</i> T. Spies, W. Praznik, A. Hofinger, F. Altmann (Wien, Austria), E. Nitsch and R. Wutka (Linz, Austria)	221
Fructo-oligosaccharides from the stems of <i>Triticum aestivum</i> W. Praznik, T. Spies and A. Hofinger (Wien, Austria)	231
Quantitative analysis of carboxymethyl chitin adsorbed on a liposome surface T. Nishiya and D. Robibo (Montreal, PQ, Canada)	239
Development of a water-soluble, sulfated (1 \rightarrow 3)- β -D-glucan biological response modifier derived from <i>Saccharomyces cerevisiae</i> D.L. Williams (Johnson City, TN, USA), H.A. Pretus, R.B. McNamee, E.L. Jones, H.E. Ensley (New Orleans, LA, USA) and I.W. Browder (Johnson City, TN, USA)	247
¹ H-NMR-Untersuchungen zur Spaltspezifität von α - und β -D-Glucosidasen gegenüber Disacchariden. II R. Wajda, M. König, H. Ludwig, S. Mronga und H. Friebohn (Heidelberg, Deutschland) ..	259
Mechanism of action of D-galacturonan digalacturonohydrolase of <i>Selenomonas ruminantium</i> on oligogalactosiduronic acids K. Heinrichová, M. Džuráková and L. Rexová-Benková (Bratislava, Czechoslovakia)	269
Notes	
Nouvelle voie d'accès au D-ribose et au D-lyxose B. Lacourt-Gadras, M. Grignon-Dubois et B. Rezzonico (Talence, France)	281
Synthesis of <i>N</i> -acetyl-lactosamine via ozonolysis of a nitro derivative E. Lattová and L. Petruš (Bratislava, Czechoslovakia)	289

A simple method for avoiding alkylthio group migration during the synthesis of thioglycoside 2,3-orthoesters. An improved synthesis of partially acylated 1-thio- α -L-rhamnopyranosides V. Pozsgay (Bethesda, MD, USA)	295
Isolation and identification of <i>O</i> - β -D-fructofuranosyl-(2 \rightarrow 1)- <i>O</i> - β -D-fructofuranosyl-(2 \rightarrow 1)-D-fructose, a product of the enzymic hydrolysis of the inulin from <i>Cichorium intybus</i> A. De Bruyn, A.P. Alvarez, P. Sandra (Gent, Belgium) and L. De Leenheer (Tienen, Belgium)	303
Studies on anticoagulant-active arabinan sulfates from the green alga, <i>Codium latum</i> T. Uehara, M. Takeshita and M. Maeda (Saitama, Japan)	309
<i>Preliminary communication</i>	
One- and two-dimensional ^1H NMR investigations of the inclusion of the anti-cancer drug mitoxantrone in cyclomaltooligosaccharides N. Birlirakis and B. Perly (Gif sur Yvette, France)	C1
A new method for <i>N</i> -alkyl and <i>N,N</i> -dialkyl-D-glucosamines J.M. Vega-Pérez, J.L. Espartero and F. Alcudia (Sevilla, Spain)	C5
A study of possible sulfate loss during the chemical release of sulfated oligosaccharides from glycoproteins K.R. King, J.M. Williams (Swansea, United Kingdom), J.R. Clamp and A.P. Corfield (Bristol, United Kingdom)	C9
A facile, systematic synthesis of ganglio-series gangliosides: Total synthesis of gangliosides GM ₁ and GD _{1a} A. Hasegawa, T. Nagahama and M. Kiso (Gifu, Japan)	C13
Structure of the O-specific polysaccharide of <i>Proteus penneri</i> 62 containing 2-acetamido-3- <i>O</i> -[(<i>S</i>)-1-carboxyethyl]-2-deoxy-D-glucose (<i>N</i> -acetylismuramic acid) Y.A. Knirel, N.A. Paramonov, E.V. Vinogradov, A.S. Shashkov, N.K. Kochetkov (Moscow, Russian Federation), Z. Sidorczyk and A. Swierzko (Lodz, Poland)	C19
<i>Announcements</i>	C25
<i>Author index</i>	C27
<i>Subject index</i>	C29
<i>Contents</i>	C33